

M O R A L E B O O S T E R

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Table of Contents

| Article | Page |
|---|------|
| I. Voices From The Outside World | 2 |
| II. Progress Is Our Most Important Product | 5 |
| III. Some Economic Notes: Part Three | 7 |
| IV. Condiments | 8 |

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I. Voices From The Outside World

"In a unique building south of [Denver] the sun rises and sets every 24 1/2 hours, the temperatures range from 180 degrees below zero to 95 degrees above, and 250 scientists and engineers begin and quit work on Martian time. Their mission is to send a Viking spacecraft through the torture of operating on the surface of the planet as part of a flight qualification program leading to the launch. A long series of tests has been completed at the space center of Martin Marietta Aerospace, prime contractor for the Viking project. Viking is the National Aeronautics and Space Administration program to land and explore the surface of Mars in 1976 with an unmanned spacecraft. 'It will work,' said Walter O. Lowrie, company vice president. The head of the Viking program said the lander will sample the soil, measure the atmosphere, photograph the surface and then process the data and transmit it to earth. Two Viking spacecraft are to be launched next August aboard separate Titan 3-Centaur rockets for the 11-month, 400-million mile journey to the red planet. The careful creation of the Mars-like conditions took place in a huge five-story space simulation vacuum chamber at Martin's space center. Inside, the Mars sun was simulated by eight powerful lamps. Carbon dioxide was pumped inside to simulate the planet's atmosphere. And extremely cold liquid hydrogen flowed through the chamber walls to produce temperatures typical of a Martian day. Those working on the project set their clocks to the 24 1/2-hour Martian day. The Viking proof model is a non-flying replica of the two mission spacecraft, programmed to function just as on Mars. Open boxes of soil, similar in texture to what scientists expect to find near the landing site, were arranged in front of the spacecraft. The 11-foot boom from the lander scooped up samples and deposited the soil inside. On the Mars surface, instruments would analyze the soil for inorganic materials such as basic chemical elements, and for organic materials, as well as signs of living organisms." The Los Angeles Times, Part I-A, Page 8, May 22, 1975 from AP.

"Venus has long been an irresistible target for Russian space scientists, who have sent at least nine unmanned probes arcing toward the cloud-shrouded planet--compared with only four sent by the U.S. Last week, as Venus moved into a favorable position once more (as it does every 18 months), the Soviets launched two more ships on the four-month, 230 million-mile journey. Guarded as usual, the Russians said only that Venera 9 and 10 were a 'new type of spacecraft' that would make scientific explorations of Venus and its environment. Western observers expected the ships to attempt soft landings on the scalding Venusian surface, where the temperature is more than 1,000°F.--hot enough to melt lead--and atmospheric pressure is 90 times that of the earth's at sea level." Time, Page 67, June 23, 1975.

"Two cosmonauts began their fifth week in space on Saturday and appeared certain to set a Soviet space endurance record. Lt. Col. Pyotr Klimuk and civilian engineer Vitaly Sevastyanov were continuing scientific experiments aboard the orbiting Salyut 4 space station, the official Soviet press agency Tass said. The cosmonauts were sent aloft May 24. Two cosmonauts spent 28 days aboard Salyut 4 earlier this year and set a Soviet space endurance record of 30 days. The world record of 84 days was established by the U.S. Skylab 4 astronauts in February, 1974." The Los Angeles Times, Part I, Page 13, June 22, 1975 from UPI.

"Some of India's most backward villages are being prepared, with feverish haste, for the day when they will be awakened from their primeval slumber. The day is next July 1, when a television set installed in each of 2,400 villages is supposed to come alive with daily programs on agriculture, health and family planning, beamed from an American satellite. The villages, all in the most backward belts of the most backward states (Orissa, Madhya Pradesh, Bihar, Rajasthan, Jarnataka and Andra Pradesh) are part of the Satellite Instructional Television Experiment. The experiment is supposed to bring these villages into line with science, by the medium of the U.S. National Aeronautics and Space Administration, which owns the satellite. The giant satellite, launched last May, is

now 'parked' over the United States for experimental transmissions to remote schools in the Rocky Mountains and the Appalachians. In July it will be slowly 'drifted' eastwards and 'parked' over Equatorial Africa, from where its 30-foot antenna will be beamed on India. It was all to have happened a month earlier, in June this year. But the Americans wanted an extra month to enable the satellite to help with a current space program. This delay was welcome to the Indians, who were desperately behind in the rush job of canning enough programs to fill four hours a day in six languages, with a judicious and hopefully attractive mixture of school programs, 'cultural' entertainment and what All India Radio calls the 'hard-core' programs on family planning, agriculture and health. The scramble to be ready on time is still breathless. All India Radio is working at full pressure in three production centers. They are going to need 1,320 hours of programs (for a year) in the end, and so far they have only canned 200. But Minister of Information, I.K. Gujral, who is in overall charge, said that between 400 and 500 hours would be in the can by July 1--and that would be enough. 'We don't want to overdo the prepackaging. I would rather wait for the feedback to know how the villages are reacting, and then go ahead and make the right programs.' All India Radio is not the most modern of broadcasting systems--its news bulletins probably rank as among the least informative in the world--and it is hard to imagine it rising to so stirring a challenge. But P.V. Krishnamurti, the deputy director who has been put in charge is so enthusiastic that the experiment promises to leave a permanent mark on the organization. 'Already some of our programs for SITE have been snapped up for use in normal TV transmission,' he said. 'We are putting the best resources of this country, in script writers and producers, into this program.' Transmission from the ground station at Ahmedabad to the satellite will have a single picture with two sound tracks, so each film can be broadcast simultaneously to two of the six language areas. Mornings will be reserved for school broadcasts. In the evenings there will be a double 'sandwich' of 'cultural' programs (songs and dances) interspersed with the educational material. One film shows farmers how to make a virtue of the fertilizer shortage. Instead of spreading your super phosphate on rice, you mix it with an equal part of earth and two parts of water, allow to stand for an hour, and dip the rice shoots in the slurry before replanting. Another urges the sowing of sorghum in September rather than October to catch the soil while it still has moisture and lessen the effects of insect pests. Family planning films will show no intimate details. 'We have to remember we're dealing with conservative, mixed audiences.' All the propaganda will be about a happy life with healthy children each with enough to eat. The newly fashionable link between the family-planning message and the rural-health message is to be fully exploited. One film tries to explode the old Indian fallacy that a mother's milk is 'the best food' for a child up to 2 even 3 years of age. The film shows fretful, underfed toddlers who get nothing but mother's milk, and happy ones who get other things." The Los Angeles Times, Part I-A, Pages 8 and 9, May 21, 1975 from The Manchester Guardian.

"A 'perfect' circular orbit 343 miles above earth was achieved by a huge telescope designed to study the sun and perhaps unravel some of the mystery of the 'black holes' in space. The one-ton, \$58 million Orbiting Solar Observatory 8, last of a series of space telescopes that first went into operation in 1962, began transmitting data within an hour after launching from Cape Canaveral, Fla. The launching had been scheduled for Friday but was delayed a day after an electrical malfunction was discovered." The Los Angeles Times Part I, Page 2, June 22, 1975.

"New evidence for an old theory that the moon may have been a part of the primal earth that broke away 4.5 billion years ago was offered Wednesday in a joint paper by two eminent American scientists. Harold C. Urey of UC San Diego and John A. O'Keefe of the Goddard Space Flight Center, Greenbelt, Md., advanced the possibility again in a presentation by O'Keefe before a scientific conference of the Royal Society in London. Working together from opposite sides of the country, the two scientists found chemical evidence to support the theory put forth at the turn of the century by Sir George Darwin that the earth and the moon were once part of the same mass. Using data gathered from Apollo lunar landing missions and unmanned moon probes, Urey and O'Keefe tested various

theories before concluding that the fission or split-off theory should be considered seriously. In a telephone interview, Urey said the new aspect of the theory concerns the apparent leaching of iron and so-called noble metals--gold, platinum, nickel, etc.--from one end of a single, cigar-shaped molten mass to its center. Theoretically, this process--the sinking of metal to the center of the mass--took place before the moon broke off, and could account for the low density of the moon and its low content of noble metals. The moon does not possess a large core as does earth, it was pointed out. In fact, earth's core of molten iron is some 4,000 miles in diameter compared with the planet's outside diameter of 8,000 miles. The moon's molten core, if there is one, is believed to be only 446 miles thick compared with a lunar diameter of 2,160 miles." The Los Angeles Times, Part II, Page 1, June 12, 1975 by Marvin Miles.

"Pioneer 10, now 745 million miles from earth between the planets Saturn and Jupiter, has been undergoing a mysterious change in its axis of rotation, scientists at the National Aeronautics and Space Administration said Saturday. A spokesman for NASA said the craft, which was planned to be the first man-made object to leave the solar system, was not necessarily in danger. The change causes the axis of the spacecraft to point away from the earth about one-twelfth of a degree each day. 'It's quite a mystery. We don't quite understand it. It's been going on for about three weeks,' the spokesman said. 'We're keeping a close eye on it.' He said the change might be due to 'some slight malfunction or a planetary force we don't know about.' Scientists have ruled out, through various checks, the possibilities of a slight leak in the craft, interference from interstellar dust or magnetic field distortions, he said." The Los Angeles Times, Part I, Page 24, June 15, 1975 from AP.

"Soyuz 18 cosmonauts Pyotr Klimuk and Vitaly Sevastyanov set a new Soviet duration record for men in space on June 24, breaking the 30-day mark for the Soyuz 17 crewmen. . . . Both crews spent most of their time aboard the Salyut 4 space station, with Klimuk and Sevastyanov becoming the first crew to successfully re-occupy a Salyut. The busy Soyuz 18 itinerary has included solar spectroscopy, X-ray astronomy, solar and galactic cosmic-ray studies and investigations of earth's atmosphere including pollution and density measurements." Science News, Page 414, June 23, 1975.

"The most advanced meteorological satellite yet developed will be orbited 690 miles high from the Western Test Range near Lompoc Wednesday to report weather findings twice a day over every point on earth. Designated Nimbus F, the spacecraft will carry a sophisticated payload of nine instruments to return data for the international Global Atmospheric Research Program (GARP), the research arm of the World Weather Program. The 1,823-pound orbiter developed by the National Aeronautics and Space Administration should increase the accuracy of weather forecasts and eventually help make possible long-range predictions that could save more than \$2 billion annually. One of the satellite's systems will relay temperature, pressure, altitude and wind information from super-pressure balloons designed to float at 65,600 feet. Information also will be returned from drifting ocean buoys, including data on currents, surface conditions, winds, pressure and temperature that will be measured to a depth of about 100 meters. Other equipment will demonstrate the technique for tracking polar orbiting spacecraft and returning data to earth using a geosynchronous . . . satellite 23,300 miles high as a relay spacecraft. Other meteorological systems will study earth's atmospheric radiation balance to a precision never before achieved, map the liquid water content of clouds and ocean rainfall and report on cloud cover and the distribution of sea ice. The new spacecraft is expected to participate in the check-out and evaluation of data systems to be used in GARP's first worldwide experiment scheduled for 1978-1979." The Los Angeles Times, Part I, Page 26, June 10, 1975 by Marvin Miles, emphasis added.

"Technicians on both sides of the globe yesterday put the finishing touches on preparations for the joint American and Russian Apollo-Soyuz flight--a mission which at least

one U.S. senator believes should be postponed. Sen. William Proxmire . . . disclosed that the Central Intelligence Agency fears the Soviets do not have the technical ability to handle safely both the Apollo-Soyuz flight and the Soyuz 18-Salyut mission, which the Russians now have in progress. Proxmire urged that the Apollo-Soyuz mission be delayed until the Soviets bring down the Salyut space station. The U.S. space agency rejected the suggestion. Glynn S. Lunney, America's technical director for the mission, said that the agency 'has concluded that the Soyuz 18-Salyut 4 mission does not constitute a hazard' for the Apollo-Soyuz test project. The U.S. crew is scheduled for a July 15 launching." The San Francisco Chronicle, Page 8, July 3, 1975 from UPI.

"In completing their sixth week in space Saturday, cosmonauts Pyotr Klimuk and Vitaly Sevastyanov studied X-ray sources in the constellation of Scorpio, the Soviet press agency Tass said. Klimuk and Sevastyanov, orbiting the earth in their Salyut 4 space station, are well and the station is functioning normally, Tass said." The Los Angeles Times, Part I, Page 7, July 6, 1975 from UPI.

II. Progress Is Our Most Important Product

To say that millions of people eager to support an expanded space program exist within the United States (not to mention the multitudes living outside these borders) is not to say how organization of those millions into a disciplined bloc working for expanded space activities is to be done. As mentioned in last month's issue, as well as others previous to that one, the total category of space enthusiasts is comprised of many diverse groups. Astronauts are not astrophysicists; space industrialists and industrial workers are not science-fiction afficianados; government bureaucrats are not ufologists; cosmic romantics are not frustrated pioneers seeking new worlds to conquer. It is clear from such a partial recitation of the groups comprising the category of space enthusiasts that there exist as many dissimilarities among them as congruencies of vision and desire for the Space Experience. This should not surprise us for the spaceways and galactic reaches are enormous in their construction as well as unimaginably complex in their components and interacting parts. This state is reflected in the numerous reasons that can be cited for the value of expanding this nation's efforts to explore and exploit the space environment. Indeed, every particular reason for such expansion is also the delineating characteristic of a particular group of space enthusiasts.

The first task necessary for enlisting the support for U.F.O.E.S.P. of these many space enthusiasts is analysis of the various groups in terms of the resources needed to proselytize successfully amongst them, the experience and resources of the organization, and the reciprocal accessibility of U.F.O.E.S.P. and the space enthusiasts to each other. Some months ago, the Board of Governors undertook such analysis and concluded that science-fiction afficianados represented the group with the greatest potential for individuals willing to join forces with U.F.O.E.S.P. now. Three factors formed the primary basis for this conclusion. The first consideration was that the Board, through the personal activities of its members, had greater experience with this literary genre and its adherents than with any of the other groups of space enthusiasts (may we be colloquial occasionally and say 'space freaks' just for variety?). The second factor was the wide latitude the Board would have with respect to the manner by which it pursued the objective of seeking members for the organization from this group as science-fiction fandom possesses strikingly formal and informal aspects. The third, and perhaps most important, point was the understanding, for the most part intuitive, the Board possessed of the nature of the literature itself. Science fiction, though it may be viewed in many ways (arguments rage periodically within the genre as to the real meaning of science fiction), essentially is concerned with alternate Universes relating in some fashion to the one in which we (seem) to exist. Given this fact (for lack of a better term), the rationalist characteristic of the literature, and the enormous part space travel and experiences have played in forming plots and backgrounds for the field's writings, it appeared to the Board of Governors that science-fiction fandom would be more receptive to U.F.O.E.S.P.'s message at this time than other groups such as astrophysicists (scientists in general, though one should not make the

error of thinking that all scientists are in concensus about space) or space industrialists.

Our original intention was to send a delegation to the 33rd World Science-Fiction Convention being held in Melbourne, Australia this year since both the President (Graham Maughan) and the Treasurer (Linda Strickler) had plans to travel to Australia for personal reasons. However, it shortly became obvious that Mr. Maughan and Ms. Strickler would not be able to journey to the South Seas and, as U.F.O.E.S.P. did not (and does not it might be added) possess the wherewithal to undertake such a project on its own, consequently a delegation could not be sent to Aussiecon. After much discussion, it was decided that an advertisement for the organization would be placed in the Programme Book for the world convention and that an attempt would be made to send a delegation to the 28th West Coast Science Fantasy Conference since that event was being held in Oakland, California and our Assistant President For Interorganizational Affairs (Delmar Tompkins) would be able to accompany Mr. Maughan and Ms. Strickler as well. Plans were made, memberships in Westercon 28 obtained, and the delegation formally met in San Francisco a day prior to the start of the conference.

The delegation's first days were spent by simply acquainting itself with the terrain and inhabitants, so to speak, of this new reality. They also were spent pondering greatly the arrangements to be made for the planned meeting that U.F.O.E.S.P. was to hold Sunday, July 6th since, much to our surprise, this meeting had been printed in the calendar of events for the conference. Since it was not clear how this listing would affect the number of people attending the meeting, and since the delegation was reluctant to make this first public appearance of the organization a large one (due to the delegation's inexperience in open forums), the original publicity plans for the meeting were foregone and the listing in the calendar of events in the Program Book was supplemented only by notices outside the door of the room where the meeting was held. It was originally expected that thirty or so people would attend and that is approximately the number who did come to the meeting to hear our presentation.

The meeting was essentially a discussion group of the possibilities for generating widened support for the U.S. space program. It was also a roaring success! When we went into the meeting, the organization had eight members; after the meeting, United For Our Expanded Space Programs had a membership of fifteen, nearly a one-hundred percent increase in its size. The most remarkable thing was that the first three individuals to decide for membership decided to be active members. It was only after the presentation moved into a very informal structure that people stepped forward to purchase passive memberships. Our success did not end there. Jerry Pournelle, an author whose book A Mote In God's Eye (co-authored with Larry Niven) has been nominated for a Hugo award this year, told us of a group located in Washington, D.C. trying to generate expanded space activities by lobbying Congress from an aerospace industry perspective (the group is called Friends of American Aerospace Technology--FAAST for short). In addition, a young woman, representing herself as a correspondent for a local (suburban) newspaper, talked at length with the Assistant President and the President about U.F.O.E.S.P. and indicated to Mr. Tompkins that she was working on a story concerning such groups or the science-fantasy conference or both. Furthermore, one of the people who purchased an active membership told the delegation that he had been collecting information on groups seeking to create greater space activities and greater support for such activities which information he was willing to share with us. And in addition to that (how can I forget?!), the Assistant President For Light Industry (Ginette Stammnitz), although unable to attend the meeting Sunday, was able to attend the conference Saturday, as well as discuss, at her new home in Antioch, California on Monday, the meeting's success with the remaining Board. Truly a most rewarding and auspicious event which will mark one of the many, early turning points in the organization's history.

The 34th World Science-Fiction Convention will be held in 1976 in Kansas City, Missouri. The committee planning this convention expects as many as seven thousand people in attendance. Such a turnout, coupled with the success we had at Westercon 28 with, frankly, only a fairly organized presentation, clearly indicated to the Board of Governors that a vigorous recruitment effort should be made at that gathering. Although this convention is still a year away, it is not too soon to make preparations for our presence there.

Consequently, we have obtained three attending memberships with the hope that perhaps a larger delegation can be sent if more members indicate early that they would wish to go (it should be noted that in this event it would be necessary to ask for further funds from those so interested to cover the additional membership costs). The Board of Governors strongly encourages all those who have any ideas as to how U.F.O.E.S.P. should present its program for expanded space efforts or what artifacts of information should be included in such a presentation to communicate those ideas to the Board of Governors as soon as possible. Space is the place and it is obvious that in science-fiction fandom we have one group of people who are ready not only to accept this idea but who are also willing to work for/towards it. A Moonbase by '89! There's nothing like the future!

III. Some Economic Notes: Part Three

In issues past we have spoken primarily about the conservative aspects of the economic issue: the money to be made from an expanded space program through new industries arising from the exploitation of the space environment, the transfer of old industries to the celestial realms, and the spin-offs from the space program to the civilian economy (as well as the direct application of space efforts to such problems as pollution control, weather forecasting and communications). Although the emphasis at this time is on such practical matters as these, we should not be blind to economic arguments which are less direct but nonetheless possess huge implications for an economic system as complicated as the United States has. To present as strong a rationale as possible for expansion in the country's space efforts it is necessary that we not only understand the full range of economic reasons for such efforts but that we have developed them as fully as we can, even if we choose not to emphasize a particular set at one time or another. With that, let us proceed to a quotation for perspective.

"Here is an urgent message for the nation's economic policy-makers: The time has come to start grasping at harebrained ideas. President Ford and a growing number of experts, both in and out of politics, all tell us persuasively that the economy is entering, or may be about to enter, a recovery. But what does that really mean? Even two years from now, the prevailing projections indicate that 8% of the labor force could still be out of work, and inflation would probably remain well above 5%--too much for distressed households, and too much to sustain the investment and saving needed to assure a stable supply of new jobs. Something fundamental has gone wrong with the way we handle our economy. Instead of being able to avoid excessive inflation by accepting excessive unemployment, or vice versa, we now are stuck with too much of both. And the unhappy economic predictions confirm that even the best taxing-and-spending programs and the finest monetary and credit policies won't solve the muddle in which we find ourselves. Ordinary answers just won't do. True, the mainstream of political economics offers a few alternative suggestions. Some would have the nation try wage and price controls again; . . . Others . . . call for central economic planning or government allocation of credit to achieve national goals; of course, the federal policy makers who got us into our current mess would be responsible for all the planning and allocation. Beyond this, even the best central decision-maker cannot orchestrate a modern economy's millions of moving parts. . . . Many sound economists now warn us that the coming 'recovery' could lead to another, deeper depression before inflation is knocked down enough to permit any lasting prosperity. . . . So it is time for Congress and the President to listen to the fringes and take up less-popular proposals--ideas that sound unworkable, or excessive, or even a little nutty. They just might contain the germ of a solution. They need a hearing . . . [For example, the nation might:]--Set up a massive, permanent government public-jobs program . . ." The Los Angeles Times, Part II, Page 7, May 22, 1975 by Robert E. Wood, emphasis added.

To fully explicate the two points made above (i.e., radical approaches are necessary to deal with the current economic situation; and a permanent public works program is an example of such a radical proposal) is not possible in the limited space here (would

someone out there be interested in writing a treatise?) but the outlines of the argument are clear. Since the days of Franklin Roosevelt's presidency, it has been accepted Federal philosophy that the Federal government should engage, to a greater or lesser degree depending on the given circumstances, in projects which give employment to substantial numbers of people. (It should be noted that the government engages in such work even when the economy is riding high, though, naturally, it is much less involved in prosperous times than depressed ones.) Certainly, it would not be an alien idea to institute a massive, permanent public-jobs policy and, given the current constitution of the Congress, it would be expected that acceptance of such a policy would be more easily obtained than many other possible remedies to the situation, such as abolishing the corporate income tax, breaking up the biggest unions and companies and farm co-operatives or putting the currency back on the gold standard (some of the other proposals put forth in the article just quoted). The only serious questions would be: how long is 'permanent'; and to what end would this policy be directed?

The answers are fairly straightforward: decades at the very least; and space!

It is increasingly obvious, as our economic trials and tribulations continue and, in many respects, worsen that any solution or set of solutions to these problems is going to necessitate implementation over long time spans. The nation's economy is so large, complicated, and intimately involved with the many national economies of the world that any programs' effects are not going to dramatically and suddenly affect the existence of our economic woes. It is also becoming apparent that, even if solutions could be devised which would affect our economic troubles dramatically and suddenly, they likely would not be desirable for the same reasons that the effects of any proposed solutions are not likely to possess such a powerful character. That is to say, the economy is so large, complicated and involved with other nations' economies that any policy which had the ability to drastically affect this nation's situation would also be a destabilizing policy as its effects would be magnified as they 'spread' throughout the economic system.

The advantages to making a permanent public-jobs policy space orientated are two: In the first place, it would be unnecessary to create a massive, new bureaucracy to institute such a policy as: a) NASA is a solidly established government department or division (the technical terms for the Federal Government's many parts are not completely understood at this end at this time) which, due to a sizable retraction in its extent over the past six or so years, possesses a far larger infrastructure than current funding will allow it to fill but into which, with increased appropriations, it could expand easily; and b) NASA has developed many programs which have been suspended simply due to lack of funding and which could easily be retrieved from the files if monies were forthcoming. The second advantage is simply the total of all the benefits to be derived from an expanded space program which have been elucidated in previous installments of this article and the two petitions sent to Washington, D.C. to date. The combination of these two positive factors, if fully and properly developed, would pose a rather formidable argument requiring enormous effort to discredit even in part. Whether this approach is employed or not, it cannot be denied that it would be useful to refine, amplify, and evolve it. We cannot be too prepared with arguments for space as our opposition, being primarily emotional, will be extremely tenacious and strident. Just by presenting an enormous number of reasons for an expanded space program we help to ensure that our position is taken seriously as, for any given audience, at least some of the supportive structure of the edifice of space expansion will make good sense, will 'hit home'. Space is the place! It's the only place there is!

IV. Condiments

United For Our Expanded Space Programs is an activist organization and it therefore encourages as much participation and initiative in the membership as possible. The opportunities for creative action in support of the general program of U.F.O.E.S.P. are

numerous and extend far beyond the ranges of time, labor and money, although it cannot be denied that it would be difficult to have a surfeit of the foregoing. In previous installments of this column we have attempted to give examples of seemingly minor but nonetheless potent ways the membership can help to exert influence, in their day to day lives, on the consciousness (let us not fear such terminology) of the American people. The vital ingredients for such actions (answering the telephone "Space is the Place!", purchasing, solely if possible, space stamps for personal correspondence, etc.) are enthusiasm and ingenuity. Though we live in a mass society, we should not be fooled into thinking that only mass actions are effective or useful. Each of us personally, working diligently and continually for a radical shift in the nation's commitment to space endeavors, can have enormous impact on the future of America in space. Let us become so immersed in the rationales for space that we become walking encyclopedias of information on the topic. Let us communicate our space dreams not only to each other but to anyone and everyone who broaches the subject or will listen. This is not to say that our entire lives must become so wrapped up with space that we cannot relate to anyone else except through that perspective; but it is to say that we should not be bashful about exploiting (let us not be afraid of the terminology!) every opportunity which arises to further our goal of an expansion in this nation's space programs. We are the wave of the future because we are the wave of the present. The sooner we become confident in that understanding, the sooner our goal will be achieved.

As time marches on and U.F.O.E.S.P. becomes engaged to a greater and greater degree in applying pressure on the space-policy makers to enlarge the space commitment, it becomes necessary to have greater information to support our thesis. Every member can do an invaluable service to the organization's work by simply keeping all senses tuned to the reception of space stimuli (in reading books, magazines, newspapers, advertisements; in viewing plays, television, movies; in listening to radio, recordings, conversations on the streets; in scores of other ways) and then transmitting this information to national headquarters. In addition, it becomes increasingly necessary to have explications of our space rationales recorded in such a way that it is easy for any individual member to study these rationales and to commit them to memory. This is the primary purpose of the Morale Boosters as the 'older' members are well aware. We need treatises on the projected costs for various possible, future space projects such as a Mars landing, a lunar colony, a complete survey by unmanned space probes of the entire solar system, a manned flyby of Venus or Mercury. Those of you who possess some moderate writing skills and have access to information on space matters should create a project for yourselves and the organization to begin, at the very least, the work essential to the success of our plans. Do not wait until the Board must plead for assistance in these matters; we are an activist organization! Those of you who have artistic talents, be they in music, film, drawing or what-have-you, should think of ways these talents might be used in the space publicity campaign. Do not wait until the Board must plead for assistance in these matters; initiative is always rewarded, action is the key to our success! As even the newest members must realize, the Petitions and Morale Boosters (not to mention the organizational correspondence) are nearly wholly the product of one individual. This situation not only cannot obtain indefinitely, it is also unhealthy for the best functioning of United For Our Expanded Space Programs. Let us have a multitude of voices, all clamoring for space in their distinct and unique ways. We are united for space; but we are not monolithic. There are as many reasons for space as there are people who wish to have a greater space experience in their individual lives. Space is the place; is not the Universe worth our finest energies? Forward! We advance on all fronts!

----- J. Graham Maughan